ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-95-1(116)&(131)Camden County
P.I. Nos. 511080&511081

OFFICE Preconstruction

DATE January 3, 1995

FROM C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/se

Attachment

DISTRIBUTION:

John Lively
Bob Mustin
David Studstill
Herman Griffin
Toni Dunagan
James Kennerly
Darrell Elwell
Marion Waters
Craig Brack
Paul Liles
FHWA

U.S. Department
of Transportation
**Federal Highway
Administration**

Georgia Division Office

1720 Peachtree Road, N.W.
Suite 300
Atlanta, Georgia 30367

December 15, 1994

IN REPLY REFER TO:

HTM-GA

Mr. Wayne Shackelford
Commissioner
Department of Transportation
No. 2 Capitol Square
Atlanta, Georgia 30334

Subject: Georgia Projects NH-IM-95-1(116)(131), Camden County
NH-IM-95-1(126)(132), Camden County
and NH-IM-95-1(120)(136), McIntosh County

Dear Mr. Shackelford:

We have completed our review of the concept reports for the subject projects. The reports are approved with the understanding that we will coordinate with your Environmental staff to determine the appropriate level of environmental analysis for Phase II. Based on our preliminary information regarding potential environmental impacts, particularly to wetlands, we believe that an Environmental Assessment(s) is appropriate for phase II.

We will also work with your staff to assure that logical termini are established in accordance with 23 CFR 771.111(f).

Sincerely yours,

FAMoore

for Larry R. Dreihaup, P.E.
Division Administrator

Enclosures

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-95-1(116)&(131) Camden County
P.I. Nos. 511080 & 511081

OFFICE Preconstruction

DATE November 18, 1994

FROM Hoyt J. Lively, Jr., P.E., Director of Preconstruction

TO Wayne Shackelford, Commissioner

SUBJECT PROJECT CONCEPT REPORT

These combined projects are the widening and reconstruction of I-95 in Camden County from Harriett's Bluff Overpass to SR 25 Spur to in two phases. The existing roadway consists of 2 lanes in each direction separated by a 64 foot median on approximately one-third of the project and with a split median on the remainder of the project. The existing major structures are: (1) Walker Swamp - twin 151' x 44.5' bridges with sufficiency rating of 95.5; (2) Billyville Road Overpass - 465' x 30' bridge with a sufficiency rating of 83.3; (3) SR 25 Spur Overpass - 270' x 29' bridge with a sufficiency rating of 99.0; The posted speed is 65 MPH and the design speed is 70 MPH. The base year traffic (1998) is 44,600 VPD and the design year traffic (2018) is 65,500 VPD.

NH-IM-95-1(116), Camden County (Phase I) consists of the widening and reconstruction of I-95 from 2 lanes in each direction to 3 lanes in each direction from Harriett' Bluff Overpass to SR 25 Spur for a total of 7.0 miles.

The widening is proposed as follows:

Existing 64' median section
Construct one half lane (6') and 12' shoulder (10' paved) to the inside in one direction and one half lane (6') and 15'-6" shoulder (12' paved) to the inside in the other direction. Construct one and a half lanes (18') to the outside, northbound and southbound. A total of 24' full depth new pavement is to be added to the existing 24' to achieve the ultimate 48' section in each direction. However, I-95 will first function as a 6-lane interstate by utilizing the 3 inside lanes and the newly paved outer 12' (full depth) will function as the Phase I outside shoulder.

NH-IM-95-1(116)&(131) Camden County

Existing split median
Add two 12' lanes and 12' graded shoulders to the inside northbound and southbound and reconstruct the existing outside 12' shoulder to a 14' shoulder (12' paved). This portion of I-95 will also function initially as a 6-lane interstate by utilizing the three outside lanes and the newly paved inside 12' will function as the Phase I inside shoulder.

Bridge construction will be as follows:

- Widen twin bridges over Walker Swamp to 151' x 76'
- Twin bridges at Billyville Road and SR 25 Spur (Overpasses) will be jacked approximately 1' each.
- The bridge culvert at Rose Creek Swamp will be extended to accommodate the widened section.

The existing 24' of CRC will be overlaid with asphalt. No additional right-of-way is required for the I-95 widening. The roadway will remain open to traffic during construction.

NH-IM-95-1(131) Camden County (Phase II) consists of widening the roadway from 3 lanes in each direction to 4 lanes in each direction from Harriett's Bluff Overpass to SR 25 Spur for a total of 7.0 miles.

The widening is proposed as follows:

Existing 52' median section
Construct a 12' paved outside shoulder on the existing Phase I outside graded shoulder, northbound and southbound, overlay the Phase I outside shoulders with a riding surface and open as the 4th lane, northbound and southbound.

Existing split median section
Construct a 10' paved inside shoulder on the existing Phase I inside graded shoulder, northbound and southbound. Overlay the Phase I inside shoulders with a riding surface and open as the 4th Lane, northbound and southbound.

No additional rights-of-way is required for Phase II. The roadway will remain open to traffic during construction.

NH-IM-95-1(116)&(131) Camden County

Environmental concerns for both projects include requiring a COE 404 permit; a Biological and Archeological Assessment will be required; a CE will be prepared; a public hearing is not required; time saving procedures are appropriate.

The estimated costs for this project are:

		NH-IM-95-1(116)	
	PROPOSED	APPROVED	PROG. DATE
Constr(Infl&E/C)	$20,454,000	$8,608,000	1997
Rights-of-way	-0-	---	96-07
Utilities*	LGPA	LGPA	

*Camden County signed LGPA 2-4-92 for utilities.

		NH-IM-95-1(131)	
	PROPOSED	APPROVED	PROG. DATE
Constr(Infl&E/C)	$2,517,000	---	LR
Rights-of-way	---	---	
Utilities	LGPA	LGPA	

These projects will increase capacity, enhance safety and reduce congestion along this portion of I-95. I recommend these project concepts be approved.

HJL/JDQ/se

Attachment

CONCUR: _____
Frank Danchetz, P.E., Chief Engineer

* APPROVED: FAMoore
for Larry R. Dreihaup, Division Administrator, FHWA

APPROVED: Wayne Shackelford
Wayne Shackelford, Commissioner

* SUBJECT TO COMMENTS IN ATTACH

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

NH-IM-95-1(116)
NH-IM-95-1(131)
CAMDEN COUNTY

FEDERAL ROUTE NO: I-95
STATE ROUTE NO: 405
GADOT P.I. NO: 511080
511081

Date of Report: SEPT-10-1994

RECOMMENDATION FOR APPROVAL

DATE 5/5/94	James Kennedy State Road & Airport Design Engineer
DATE	State Environmental Engineer
DATE	State Traffic Operations Engineer
DATE	District Engineer
DATE 7/27/94	Paul V. Liles Jr. State Bridge Engineer

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-95-1 (116) & (131) Camden
P.I. No. 511080, 511081

OFFICE Atlanta, Georgia

DATE Sept. 26, 1994

FROM Bob Mustin, P.E., Project Review Engineer DTM

TO C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT PROJECT CONCEPT REPORT

We have reviewed the attached Concept Report for this project.

The estimated costs of this project are as follows:

Unit (116)

Construction	$	17,708,849
Inflation (5% per year)	$	885,442
E & C (10%)	$	1,859,429
Right of Way	$	None
Reimburseable Utilities	$	?

Unit (131)

Construction	$	1,906,174
Inflation (5% per year)	$	381,235
E & C (10%)	$	228,741
Right of Way	$	None
Reimburseable Utilities	$	?

DTM:epd

Attachments

cc: James Kennerly

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-95-1(116) &(131) Camden Co.
P.I. No. 511080, 511081

OFFICE Atlanta

DATE Sept. 9, 1994

FROM James Kennerly, State Road & Airport Design Engineer

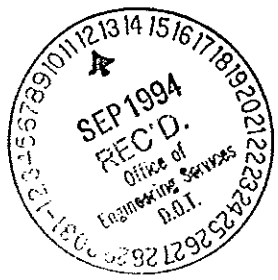
TO Bobby Mustin, Project Review Engineer

SUBJECT Project Concept Report

Attached is project concept report on the above projects. This report is for your review and further handling.

JK:JJG:bc

xc: John Lively
David Studstill, w/att
Wayne Hutto, w/att
Marion Waters, w/att
Craig Brack, w/att
Paul Liles, w/att



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

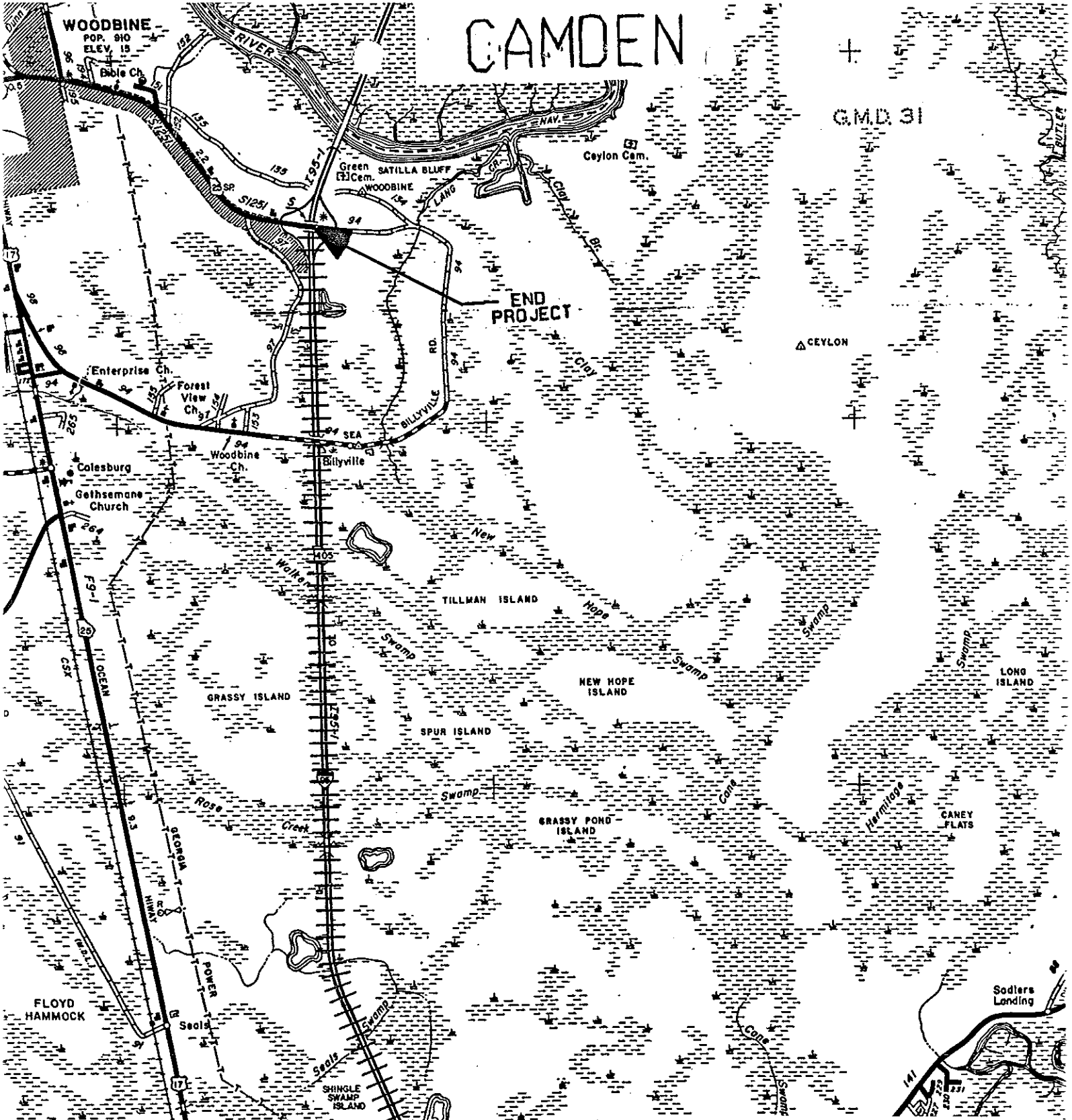
NH-IM-95-1(116)
NH-IM-95-1(131)
CAMDEN COUNTY

FEDERAL ROUTE NO: I-95
STATE ROUTE NO: 405
GADOT P.I. NO: 511080
511081

Date of Report: SEPT-10-1994

RECOMMENDATION FOR APPROVAL

9/5/94	James Kennedy
DATE	State Road & Airport Design Engineer
DATE	State Environmental Engineer
DATE	State Traffic Operations Engineer
DATE	District Engineer
DATE	State Bridge Engineer



NH-IM-95-1(116) PI 511080
CAMDEN

I-95/STATE ROUTE 405

WIDEN AND RECONSTRUCT FROM HARRIETT'S BLUFF RD TO SR 25 SP INCL. MAINLINE BRIDGE

LENGTH = 7.0 MILES
= (11.27 km)

PROJECT CONCEPT REPORT

PROJECT NUMBER: NH-IM-95-1(116) will be referred to as Phase I and NH-IM-95-1(131) will be referred to as Phase II.

PROJECT LOCATION & DESCRIPTION

These projects consist of the widening and reconstruction of 7.0 miles (11.27 km) of I-95 from Harriett's Bluff overpass to SR 25 SP overpass. Construction is proposed to be done in two phases. Phase I and Phase II are two separate projects. Phase I will widen the roadway from 2 lanes in each direction to three lanes in each direction for the entire length of the project. Phase II will widen the roadway from 3 lanes in each direction to 4 lanes in each direction for the entire length of the project.

A substantial portion of the Phase II construction will be included in the design and construction of Phase I.

Note: About 1.8 miles (2.9 km)of the project length has an existing 64'(19.2 m)median and about 5.2 miles (8.38 km)of the project length has a split median.

ROADWAY CONSTRUCTION:

The crown point has been shifted to accommodate a 52'(15.6 m) median. Referencing the typical may prove helpful.

Phase I - Existing 64'(19.2 m)Median Section

Construct one half-lane(6'(1.8 m)) and 12'(3.6 m) shoulder(10'(3.0 m) paved) to the inside in one direction and one half-lane(6'(1.8 m)) and 15'-6" (4.4 m) shoulder(12'(3.6 m)paved) to the inside in the other direction(The appropriate sides for the different inside shoulders will be determined during the plan development stage). Construct one and a half lanes(18'(5.4 m)) to the outside, Northbound and Southbound. A total of 24'(7.2 m)of full depth new pavement is to be added to the existing 24'(7.2 m), Northbound and Southbound to achieve the ultimate 48' (14.4 m) section in each direction.(The existing 24'(7.2 m) of CRC will be overlaid with asphalt). However, as stated in the Project Description, I-95 will first function as a 6-lane interstate. This will be accomplished by utilizing the 3 inside lanes, and the newly paved outer 12'(3.6 m) will function as the Phase I outside shoulder. 14'(4.2 m) graded shoulders (to be paved under Phase II) will be added to the outside, Northbound and Southbound.

Phase I - Existing Split Median

Add two-12'(3.6 m) lanes and 12'(3.6 m) graded shoulders to the inside, Northbound and Southbound and reconstruct the existing outside 12'(3.6 m) shoulder to a 14'(4.2 m) shoulder(12'(3.6 m)paved). The existing 24'(7.2 m) of CRC will be overlaid with asphalt. Once again, I-95 will first function as a 6-lane interstate. In the Split Median section, this will be accomplished by utilizing the three outside lanes and the newly paved inside 12'(3.6 m) will function as the Phase I inside shoulder.
(see comments about crown crossover)

Phase II - Existing 52'(15.6 m) Median Section

Construct a 12'(3.6 m) paved outside shoulder on the existing Phase I, outside graded shoulder, Northbound and Southbound. Overlay the Phase I outside shoulders with a riding surface and open as the 4th lane, Northbound and Southbound.

- Existing Split Median Section

Construct a 10'(3.0 m) paved inside shoulder on the existing Phase I, inside graded shoulder, Northbound and Southbound. Overlay the Phase I inside shoulders with a riding surface and open as the 4th lane, Northbound and Southbound.

The existing roadway varies from a 64'(19.2 m) median to a split median and back to a 64'(19.2 m) median. Transitions of 1323' (403.2 m) and 1086'(331.0 m), respectively, will be constructed to accommodate the differences in typicals where the median types change.

BRIDGE CONSTRUCTION:

Phase I: One mainline bridge.

Walker Swamp - twin bridges - widen to 4-12'(3.6 m) lanes, 14'(4.2 m) shoulders inside and outside, Northbound and Southbound.

Two overpasses required jacking.

Billyville Rd. and SR 25 SP must be jacked approximately 1'(0.3 m) each.

One bridge culvert at Rose Creek Swamp (quad. 6x4).

Extend culvert 24'(5.2 m) inside and 2'(.6 m) outside, Northbound and Southbound.

TRAFFIC

CURRENT		PROJECTED	
YEAR	AADT	YEAR	AADT
1998	44600	2018	65500

PDP CLASSIFICATION	FUNCTIONAL CLASSIFICATION
MINOR EXISTING	INTERSTATE PRINCIPLE ARTERIAL

NON-CA (X) CA ( ) EXEMPT ( )

PROJECT NEED & PURPOSE

I-95 is a major transportation corridor serving the eastern seaboard of the United States. It is a major corridor for the movement of goods and people between Florida and the Northeast section of the country. Due to increased traffic on I-95, additional lanes are required to increase capacity, enhance safety and reduce the constant platooning of vehicles on the roadway.

EXISTING ROADWAY

TYPICAL SECTION: 4-Lane rural interstate, 7.0 miles (11.27 km) of CRC pavement. R/W width varies from 300'(91.44 m) to 470'(143.3 m)(total).

POSTED SPEED	MAX DEGREE OF CURVE	MAX GRADE
65 MPH (105 km/h)	1.0° (1750 m)	0.5 %

MAJOR STRUCTURES:

1. Walker Swamp - two bridges - 151'(27.4 m) x 44.5'(13.6 m), SFR 95.5, PSC
2. Billyville Rd. - overpass - 465'(141.7 m) x 30'(9.1 m), SFR 83.3, steel
3. SR 25 SP - overpass - 270'(82.3 m) x 29'(8.8 m), SFR 99.0, steel

PROPOSED ROADWAY

PHASE I TYPICAL SECTION:

Existing 64' (19.2 m) Median
6-lane rural interstate with a 52'(15.6 m) median
12'(3.6 m) shoulder(10'(3.0 m) paved) inside, one direction
15.5'(4.4 m) shoulder (12'(3.6 m) paved) inside, opposite direction
12'(3.6 m) paved outside shoulder with additional
14'(4.2 m) outside graded shoulder to be used in Phase II Northbound and Southbound

Existing Split Median
6-lane rural interstate with variable median
12'(3.6 m) paved inside shoulder, with additional
12'(3.6 m) graded shoulder to be used in Phase II, North & Southbound
14'(4.2 m) shoulder(12'(3.6 m) paved) outside

PHASE II - TYPICAL SECTION:

Existing 52' (15.6 m)Median
8-lane rural interstate with a 52' (15.6 m) median
12' (3.6 m) shoulder(10'(3.0 m) paved) inside, one direction
15.5'(4.4 m) shoulder (12'3.6 m) paved) inside, opposite direction
14'(4.2 m) shoulder(12'(3.6 m) paved) outside, North & Southbound

Existing Split Median
8-lane rural interstate with variable median
12'(3.6 m) shoulder(10'(3.0 m) paved) inside, North & Southbound
14'(4.2 m) shoulder(12'(3.6 m) paved) outside, North & Southbound

DESIGN SPEED	MAX DEGREE OF CURVE (METRIC RADIUS)	MAX GRADE
70 MPH (110 km/h)	ALLOWABLE: 3.0° (585 m) PROPOSED: 1.0° (1750 m)	ALLOWABLE: 3.0 % PROPOSED: 0.5 %

PROPOSED RIGHT OF WAY

Phase I - none required
Phase II - none required

TYPE OF ACCESS CONTROL: LIMITED ACCESS

COORDINATION

CONCEPT TEAM MEETING DATE: JUL 6, 1993

LOCATION INSPECTION DATE: NONE

PERMITS REQUIRED (4f,COE,404,etc.): 404

LEVEL OF PUBLIC INVOLVEMENT: NONE

TIME SAVING PROCEDURES APPROPRIATE: YES

OTHER PROJECT IN THE AREA:
STP-141-1(12) PI NO. 532480
STP-141-1(9) PI NO. 522080,
BRF-009-1(8), PI NO. 522690,
NH-IM-95-1(114),(115),(130),(126)- PI NOS.
511070,511075,511072,511082 RESPECTIVELY.

MISCELLANEOUS

TRAFFIC CONTROL DURING CONSTRUCTION: Project to be built under traffic (2 lanes, North & Southbound)

LEVEL OF ENVIRONMENTAL ANALYSIS: Categorical Exclusion

DESIGN EXCEPTIONS REQUIRED:

	YES	NO	UNDETERMINED
SUBST HORIZ ALIGNMENT	( )	(X)	( )
SUBST ROADWAY WIDTH	( )	(X)	( )
SUBST SHOULDER WIDTH	( )	(X)	( )
SUBST VERT GRADES	( )	(X)	( )
SUBST CROSS SLOPES	( )	(X)	( )
SUBST STOPPING SIGHT DIST	( )	(X)	( )
SUBST SUPERELEV RATES	( )	(X)	( )
SUBST HORIZ CLEARANCE	( )	(X)	( )
SUBST SPEED DESIGN	( )	(X)	( )
SUBST VERTICAL CLEARANCE	( )	(X)	( )
SUBST BRIDGE WIDTH	( )	(X)	( )
SUBST BR STRUCT CAPACITY	( )	(X)	( )

UNDERGROUND STORAGE TANKS: NONE

HAZARDOUS WASTE SITES: NONE

ALTERNATIVES CONSIDERED

1. No build.

2. The alternate for building Phase I and Phase II at the same time was considered and discounted because of anticipated delay for engineering and environmental considerations associated with Phase II. There exists an immediate need for some relief for the traffic congestion on I-95 at the present.

3. The alternate of building a 40'(12 m). depressed median for the entire length of the project by adding a 12'(3.6 m) lane inside and a 12'(3.6 m) lane outside was considered. It was discounted because of drainage concerns (shallow ditch, flat grades).

COMMENTS

1. Based on projected traffic counts and capacity, the level of service is "B" or better for all intersections of ramps and crossroads, and "C" or better for ramp merges and diverges. Therefore no geometry change will be required.

2. Crown Crossover - In the 52'(15.6 m) median section, during Phase I, traffic occupies the three inside lanes. In the split median section, during Phase I, traffic occupies the three outside lanes. The roadway transitions from the 52'(15.6 m) median to the split median in a horizontal curve. This super-elevated curve will allow traffic to be shifted while avoiding any crown-crossover. When the roadway transitions from the split median back to the 52'(15.6 m) median, the crown will be crossed by traffic traveling in the inside lane. When Phase II is built, all crown-crossover will be eliminated.

3. Staging - Construct the outside 18' (5.4 m) in the proposed 52' (15.6 m) median section and shift traffic to the outside. Once traffic is shifted, construct the inside 6' (1.8 m) in the proposed 52' (15.6 m) median and the 2 inside lanes in the split median. Overlay of the existing CRC may be accomplished during low traffic volume hours.

4. Substandard super elevation exists at 2 locations and will be corrected on this project.

5. Reimbursable Utilities - In lieu of the Local Government, it is asumed that the department will pay for all eligible utility costs.

6. Due to the simple nature of this project, an in-house concept meeting will be held.

** RECOMMENDATION **

It is recommended that the 52' (15.6 m) median be approved based on the increased recovery area (38 ft (11.6 m)) for vehicles traveling in the direction not protected by shoulder mounted guardrail.

ESTIMATED COST

	PHASE I	PHASE II		PHASE I	PHASE II
CONSTRUCTION:	$ 17,708,849	1,906,174	RIGHT-OF-WAY:	$ N/A	N/A
E & C (10%) :	$ 1,770,884	190,617	ACQUIRED BY:	N/A	N/A
INFLATION :	$ 973,987	579,305	UTILITIES:	see comments	

	PHASE I	PHASE II
TOTAL CONSTRUCTION COST:	20,453,720	2,676,096

ATTACHMENTS: COST ESTIMATE, TYPICAL SECTION, CONCEPT MEETING MINUTES, and PREPROGRAMMING AUTHORIZATION.

PHASE I

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: NH-IM-95-1(116) COUNTY: CAMDEN

DATE: JULY 27, 1994 ESTIMATED LETTING DATE: JULY 1994

PREPARED BY: WAYNE G. MOTE, JR. PROJECT LENGTH (MILES): 7.0
(ANNE N. BLUN) (km) : 11.27

( ) PROGRAMMING PROCESS ( ) CONCEPT DEVELOPMENT (X) DURING PROJ DEV.

PROJECT COST

		PHASE I	PHASE II
A. RIGHT-OF-WAY:			
1. PROPERTY (land & easement) (see concept minutes)	$	N/A	N/A
2. DISPLACEMENTS:Res.0 Bus.0 M.H.0	$	N/A	N/A
3. OTHER COST (adm./court,inflation)	$	N/A	N/A
SUBTOTAL:A	$	N/A	N/A
B. REIMBURSABLE UTILITIES:			
1. RAILROAD	$	N/A	N/A
2. TRANSMISSION LINES	$	see comments	
3. SERVICES	$	see comments	
SUBTOTAL:B	$	-	-

C. CONSTRUCTION:		PHASE I	PHASE II
1. MAJOR STRUCTURES:			
a. BRIDGES - WALKER SWAMP - MAINLINE		$ 470,365	-
		$ 470,365	-
b. OVERPASSES (JACKING)			
- BILLYVILLE		$ 266,000	-
- SR 25 SP		$ 150,000	-
c. ROSE CREEK SWAMP - BRIDGE CULVERT		$ 35,782	-
SUBTOTAL:C-1		$ 1,392,512	-
2. GRADING AND DRAINAGE:			
a. borrow 569,278 cy x $5.00		$ 2,846,390	-
b. uncl exc. 25,000 cy x $2.50		$	62,500
c. drainage - inside -		$ 637,266	-
- outside -		$ 213,357	-
d. box culverts		$ 42,606	-
SUBTOTAL:C-2		$ 3,739,619	62,500
3. BASE AND PAVING:			
a. GRADED AGGREGATE BASE			
PHASE I - 161,407T x 13.16		$ 2,124,113	-
PHASE II - 32,536T x "		-	428,174
b. ASPHALT PAVING - PHASE I			
- .68" D -	13,700T x 34.50	$ 472,650	-
- 1.5" FINE SMA	16,705T x 44.90	$ 750,081	-
- 2" B -	31,559T x 37.54	$ 1,184,747	-
- BASE -	39,862T x 39.00	$ 1,554,618	-
- TACK -	33,922G x .67	$ 22,728	-
- 1.5" E (SHLDR)	6,972T x 38.59	$ 269,049	-
c. OVERLAY - PHASE I			
- .68" D -	6,972T x 34.50	$ 187,749	-
- 1.5" FINE SMA-	16,716T x 44.90	$ 750,548	-
- 2" B -	30,867T x 37.54	$ 1,158,755	-
- TACK -	20,232G x .67	$ 13,556	-
d. ASPHALT PAVING - PHASE II			
- 1.5" E -	8,358T x 38.59	$ -	322,535
- 2" B -	11,144T x 37.54	$ -	418,346
- TACK -	6,899G x .67	$ -	4,622
e. OVERLAY - PHASE II			
- .68" D -	3,787T x 34.50	$ -	130,642
- TACK -	3,449G x .67	$ -	2,311

		PHASE I	PHASE II
f. ASPHALT PAVING - RAMPS			
- .68" D -	353T x 34.50	$ 12,178	-
- 1.5" FINE SMA	780T x 44.90	$ 35,022	-
- 2" B -	1,039T x 37.54	$ 39,004	-
- BASE -	1,560T x 39.00	$ 60,840	-
- GAB -	6,072T x 13.16	$ 79,908	-
- TACK -	1,288G x .67	$ 863	-
g. ASPHALT OVERLAY - RAMPS			
- .68" D -	219T x 34.50	$ 7,555	-
- 1.5" FINE SMA	483T x 44.90	$ 21,687	-
- 2" B -	644T x 37.54	$ 24,176	-
- TACK -	598 G x .67	$ 401	-
	SUBTOTAL:C-3	$ 8,770,228	1,306,630
4. LUMP ITEMS:			
a. TRAFFIC CONTROL		$ 475,000	237,500
TEMP. BARRIER FOR BRIDGES - 400' x $22.00		$ 8,800	-
b. CLEARING AND GRUBBING 269 AC @ $3231		$ 869,139	77,544
c. GRASSING 132 AC x 1000		$ 132,000	-
17 AC x "		-	17,000
d. EROSION CONTROL		$ 190,000	95,000
e. DETOURS		$ -	-
	SUBTOTAL:C-4	$ 1,674,939	427,044
5. MISCELLANEOUS:			
a. LIGHTING		N/A	N/A
b. SIGNING - STRIPING - SIGNAL		$ 1,770,862	110,000
c. GUARDRAIL (all types) 11,661 LF @ 13.78		$ 160,689	-
d. OTHER - APPROACH WORK NEEDED FOR BRIDGES TO BE JACKED.		$ 200,000	-
	SUBTOTAL:C-5	$ 2,131,551	110,000

PHASE I

ESTIMATE SUMMARY

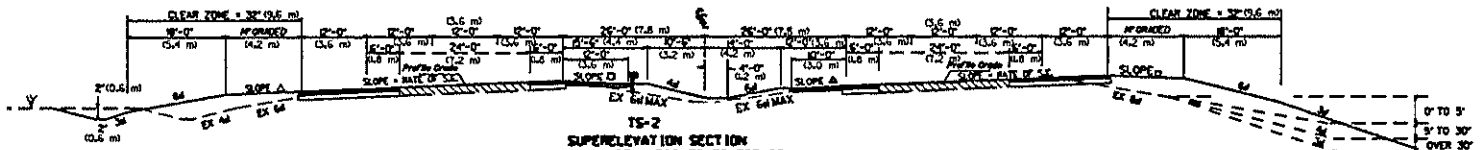
A. RIGHT-OF-WAY	$ N/A	
B. REIMBURSABLE UTILITIES	$ see comment	
C. CONSTRUCTION	**PHASE I**	**PHASE II**
1. MAJOR STRUCTURES	$ 1,392,512	-
2. GRADING AND DRAINAGE	$ 3,739,619	62,500
3. BASE AND PAVING	$ 8,770,228	1,306,630
4. LUMP ITEMS	$ 1,674,939	427,044
5. MISCELLANEOUS	$ 2,131,551	110,000
SUBTOTAL CONSTRUCTION COST .	$ 17,708,849	1,906,174
E. & C. (10%)	$ 1,770,884	190,174
INFLATION (5% PER YEAR, 1994) (5% PER YEAR, 1998)	$ 973,987	579,305
TOTAL CONSTRUCTION COST	$ 20,453,720	2,676,096

	PHASE I	**PHASE II**
GRAND TOTAL PROJECT COST .	$ 20,453,720	2,676,096

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-IM-95-1(116)		

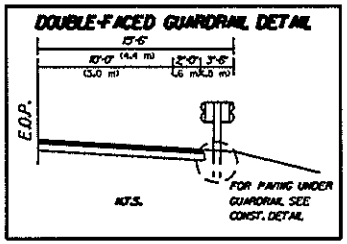
TYPICAL SECTIONS

52' (15.6 m) MED SUPER ELEVATION SECTION

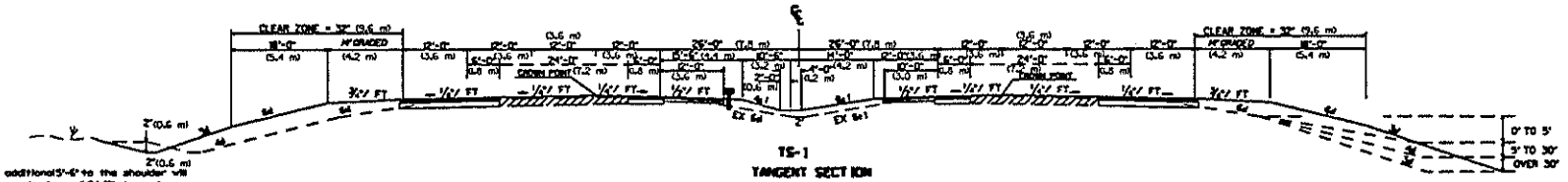


TS-2
SUPERELEVATION SECTION
STA. 508+76 TO 522+00
APPLIES TBND STA. 783+14.12 TO STA. 788+77.00

DOUBLE-FACED GUARDRAIL DETAIL



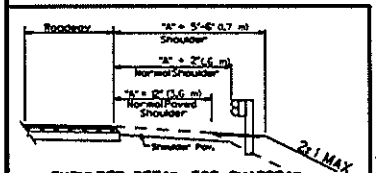
52' (15.6 m) MED TANGENT SECTION



NOTE: An additional 3'-6" to the shoulder will be required on all 2d fill slopes to facilitate the installation of guardrail.

TS-1
TANGENT SECTION

APPLIES TO STA. 419+34.09 TO STA. 508+76.97



SHOULDER DETAIL FOR GUARDRAIL
SEE PLAN FOR LOCATION
SEE GA STD 4031 OR 4032 FOR DETAILS N.T.S.

**TRANSITION SPLIT MEDIAN SECTION STA 772+27.88 TO 52' (15.6 m) MEDIAN SECTION STA 783+14.13

△ SLOPE 3/8" / 1'-0" OR RATE OF S.E. WHICHEVER IS GREATER
▲ SLOPE 1/2" / 1'-0" OR RATE OF S.E. WHICHEVER IS GREATER

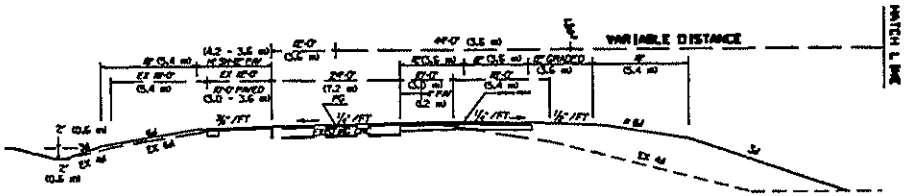
□ SLOPE AS FOLLOWS:
S.E. RATE OF 0.03'/FT OR LESS USE 1/2" IN 1'-0"
S.E. RATE OF 0.04'/FT. USE 3/8" IN 1'-0"
S.E. RATE OF 0.05'/FT. USE 1/2" IN 1'-0"
S.E. RATE OF 0.06'/FT. USE 5/8" IN 1'-0"
S.E. RATE OF 0.08'/FT. USE +0.01'/FT

ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 0.07'/FT

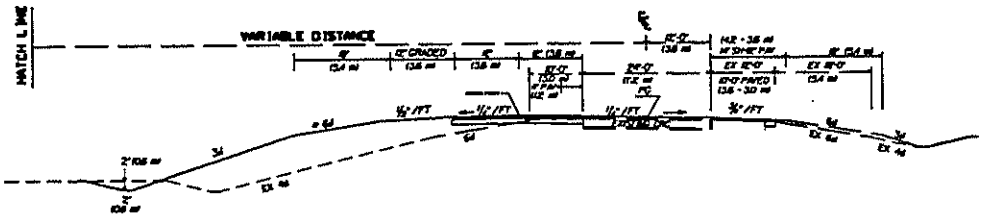
TYPICAL SECTION
PHASE I
SCALE= 1":10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-IM-95-1(119)		

SPLIT MEDIAN
TANGENT SECTION



SBL



NBL

TANGENT SECTION

**APPLIES TO STA. 556+84.615 TO STA. 706+60

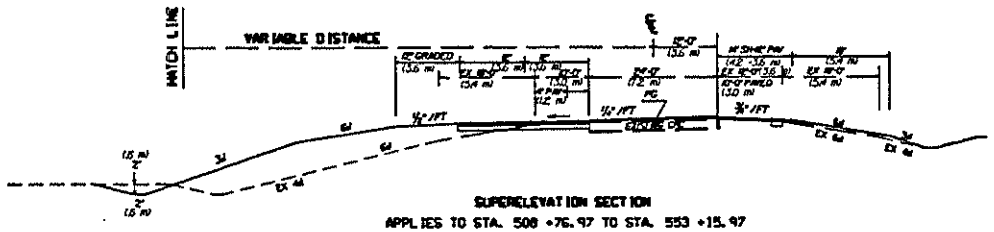
*TRANSITION 52' MEDIAN STA 508+76.97 TO SPLIT MEDIAN STA 522+00

EQUALITY 556+40.615 = 556+84.615 FWD

TYPICAL SECTION
PHASE I
SCALE= 1" : 10'

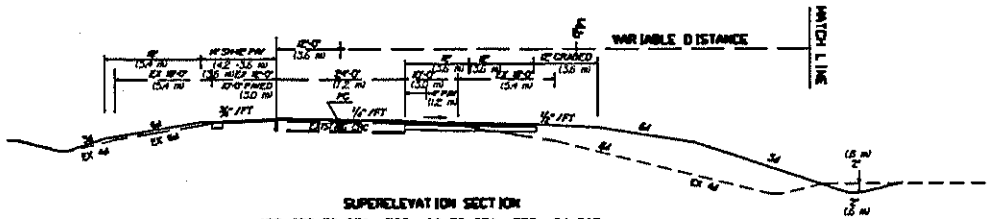
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-IM-95-1(116)		

SPLIT MEDIAN
SUPERELEVATION SECTION
NORTHBOUND



SUPERELEVATION SECTION
APPLIES TO STA. 508 +76.97 TO STA. 553 +15.97

SPLIT MEDIAN
SUPERELEVATION SECTION
SOUTHBOUND

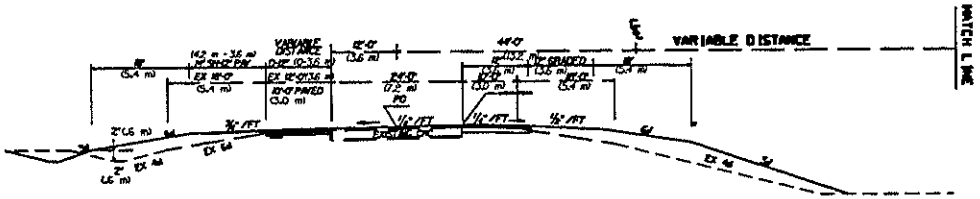


SUPERELEVATION SECTION
APPLIES TO STA. 522 +00 TO STA. 556 +84.615

TYPICAL SECTION
PHASE I
SCALE= 1":10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-IM-95-1(116)		

SPLIT MEDIAN
TANGENT SECTION



SBL

NBL

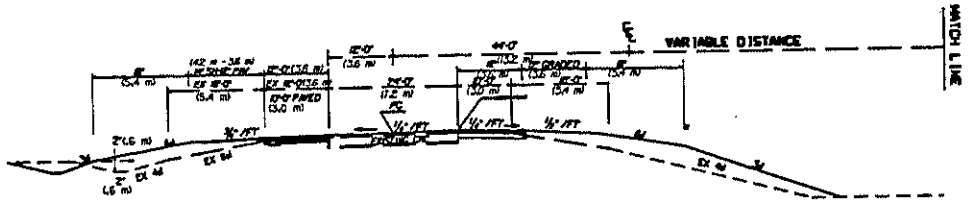
TANGENT SECTION

**APPLIES TO STA. 706+60 TO STA. 715+00

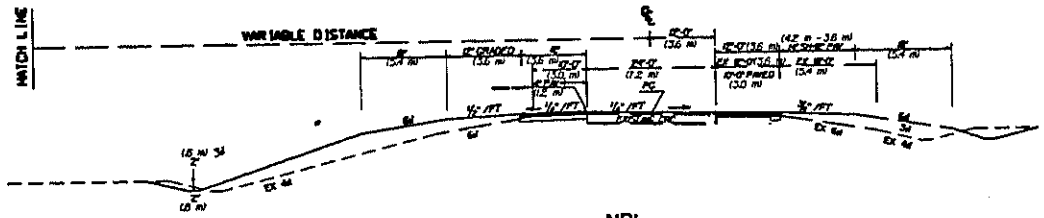
TYPICAL SECTION
PHASE I
SCALE= 1" : 10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-IM-95-1(111)G		

SPLIT MEDIAN
TANGENT SECTION



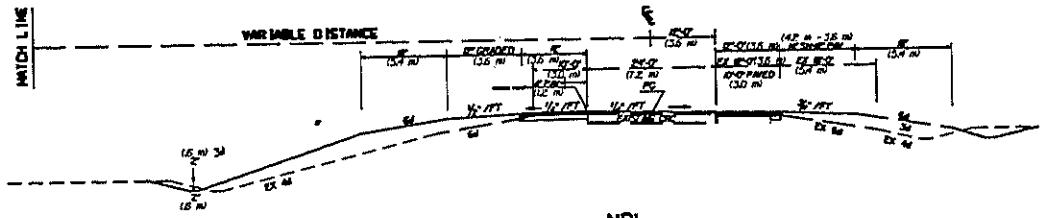
SBL



NBL

TANGENT SECTION

**APPLIES TO STA. 715+00 TO STA. 778+82.57



NBL

SUPER ELEVATION SECTION

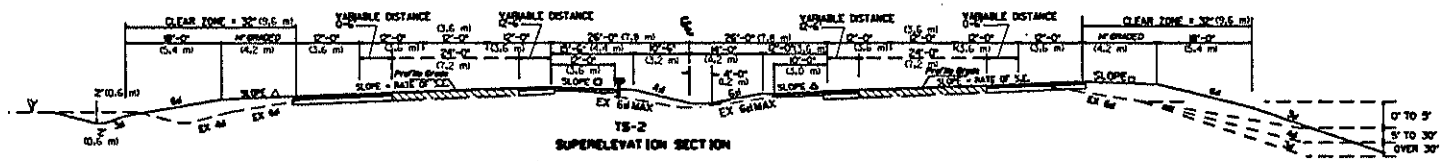
**APPLIES TO STA. 738+70.104 TO STA. 751+29.75

TYPICAL SECTION
PHASE I
SCALE= 1":10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-IM-95-1(111)0		

TYPICAL SECTIONS

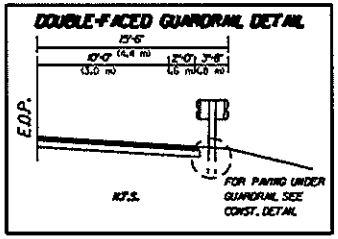
52' (15.6 m) MED SUPER ELEVATION SECTION



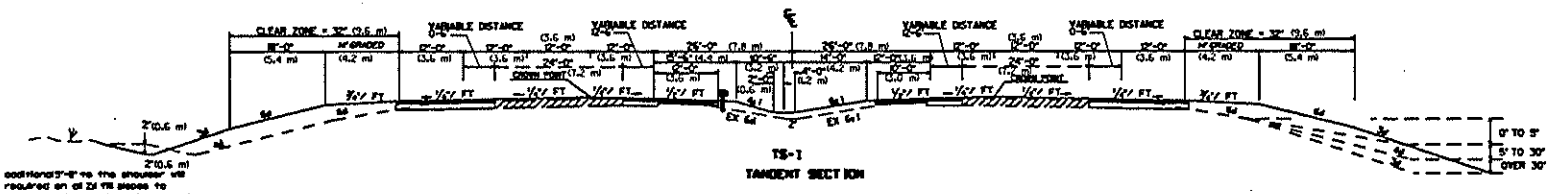
TS-2
SUPERELEVATION SECTION

APPLIES TO STA. 781+08.12 TO STA. 783+14.128

DOUBLE-FACED GUARDRAIL DETAIL



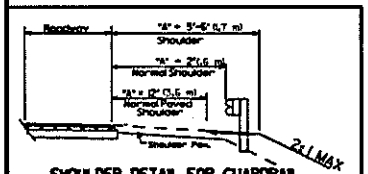
52' (15.6 m) MED TANGENT SECTION



TS-1
TANGENT SECTION

APPLIES TO STA. 778+82.57 TO STA. 781+08.12

NOTE: An additional 3'-0" to the shoulder will be required on all 24" fill slopes to facilitate the installation of guardrail.



SHOULDER DETAIL FOR GUARDRAIL
SEE PLAN FOR LOCATION
SEE GA STD 4059 OR 4052 FOR DETAILS N.T.S.

△ SLOPE 3/4" / 1'-0" OR RATE OF S.E. WHICHEVER IS GREATER
△ SLOPE 1/2" / 1'-0" OR RATE OF S.E. WHICHEVER IS GREATER

□ SLOPE AS FOLLOWS:
- S.E. RATE OF 0.02"/FT OR LESS USE 1/2" IN 1'-0"
- S.E. RATE OF 0.04"/FT. USE 3/4" IN 1'-0"
- S.E. RATE OF 0.05"/FT. USE 1" IN 1'-0"
- S.E. RATE OF 0.06"/FT. USE 1 1/2" IN 1'-0"
- S.E. RATE OF 0.08"/FT. USE +0.01"/FT

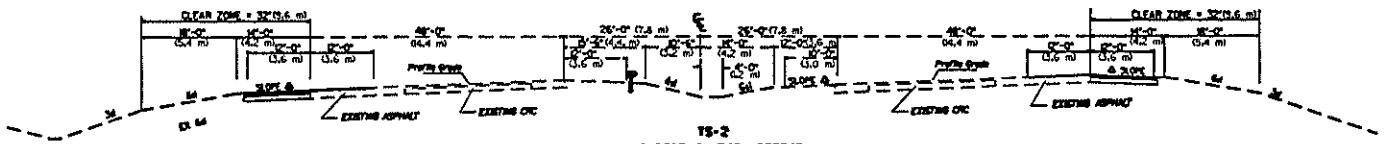
ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 0.07"/FT

TYPICAL SECTION
PHASE I
SCALE= 1": 10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-[M-95-1(113)		

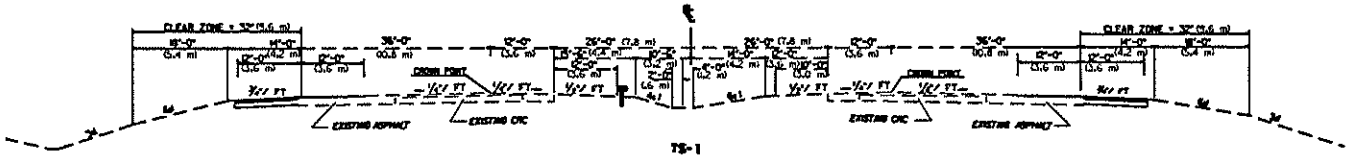
TYPICAL SECTIONS

52' (15.6 m) MED SUPER ELEVATION SECTION



TS-2
SUPERELEVATION SECTION
STA. 508+76.10 TO STA. 522+08
APPLIES TOND STA. 783+14.12 TO STA. 788+77.00

52' (15.6 m) MED TANGENT SECTION



TS-1
TANGENT SECTION

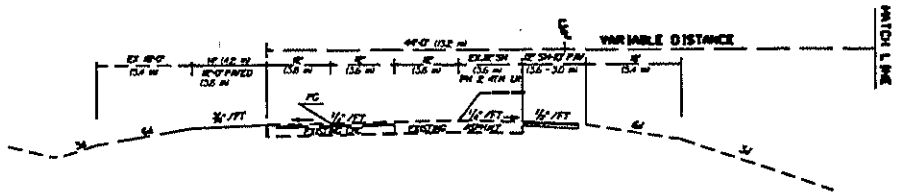
APPLIES TOSTA. 419+34.04 TO STA. 508+76.97

**TRANSITION SPLIT MEDIAN SECTION STA 772+27.88 TO 52' (15.6 m) MEDIAN SECTION STA 783+14.126

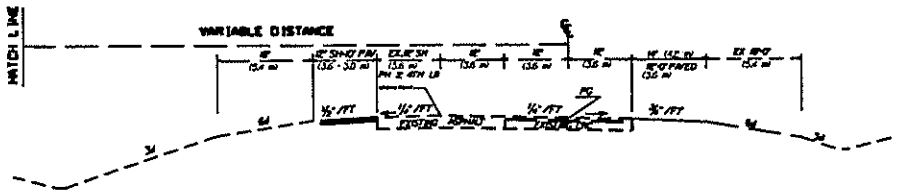
TYPICAL SECTION
PHASE II
SCALE= 1":10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-(M-95-1(131)		

SPLIT MEDIAN
TANGENT SECTION



SBL



NBL

TANGENT SECTION

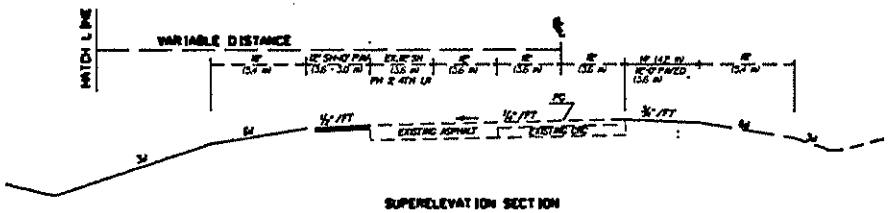
**APPLIES TO STA. 556+64.615 TO STA. 706+60

*TRANSITION 52' (15.6 m) MEDIAN STA. 508+76.97 TO SPLIT MEDIAN STA. 522+00 - SEE DETAIL 3

TYPICAL SECTION
PHASE II
SCALE= 1":10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-[N-95-1((13))		

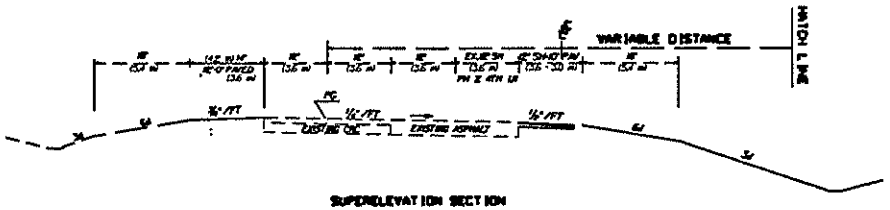
SPLIT MEDIAN
SUPERELEVATION SECTION
NORTHBOUND



SUPERELEVATION SECTION
APPLIES TO STA. 508 +76.97 TO STA. 553 +15.97

(STATIONING ALONG NORTHBOUND ALIGNMENT)

SPLIT MEDIAN
SUPERELEVATION SECTION
SOUTHBOUND

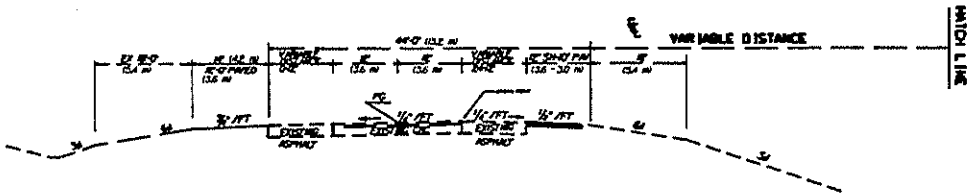


SUPERELEVATION SECTION
APPLIES TO STA. 522 +00 TO STA. 556 +84.615

TYPICAL SECTION
PHASE II
SCALE= 1": 10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-IM-95-1(113)		

SPLIT MEDIAN
TANGENT SECTION



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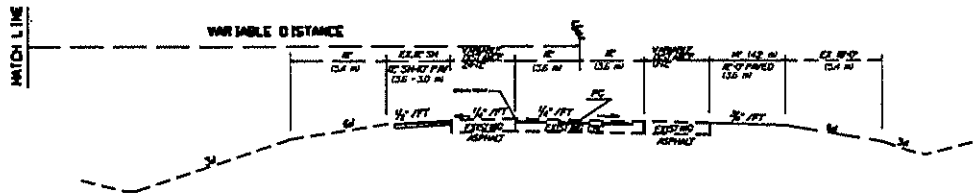


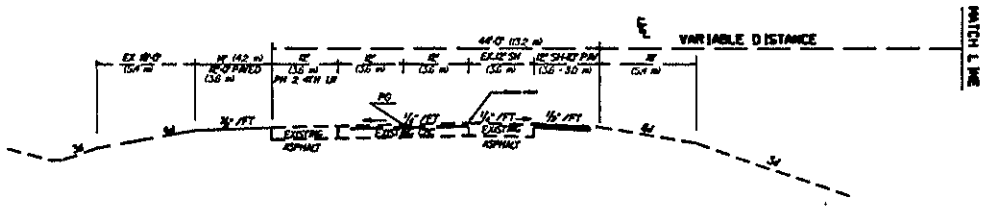
NBL

TANGENT SECTION
**APPLIES TO STA. 706+60 TO STA. 715+00

TYPICAL SECTION
PHASE II
SCALE= 1":10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-IM-95-1(131)		

SPLIT MEDIAN
TANGENT SECTION



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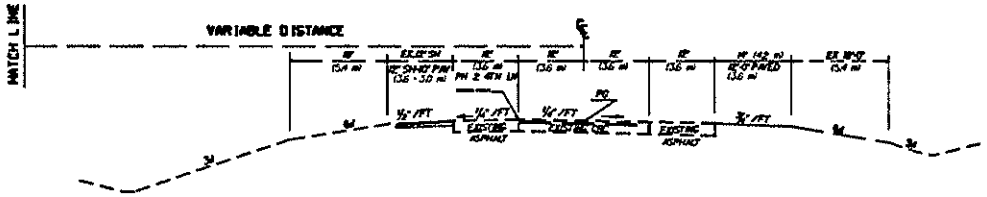
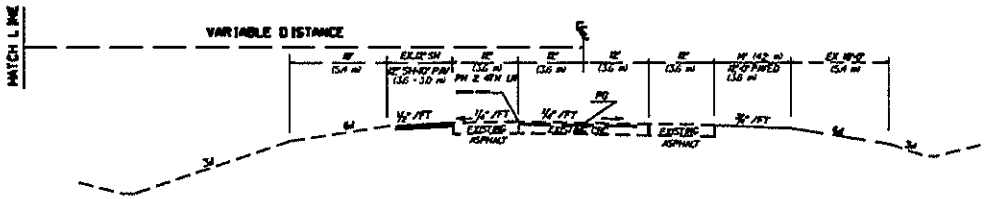


NBL

TANGENT SECTION

**APPLIES TO STA. 715+00 TO STA. 778+82.57



NBL

SUPER ELEVATION SECTION

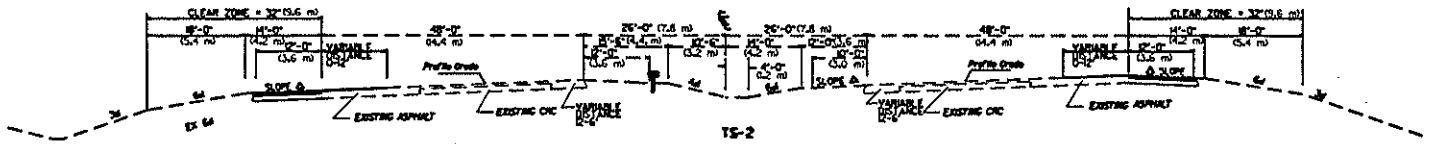
**APPLIES TO STA. 738+70.104 TO STA. 751+29.75

TYPICAL SECTION
PHASE II
SCALE= 1":10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH-IM-95-1(131)		

TYPICAL SECTIONS

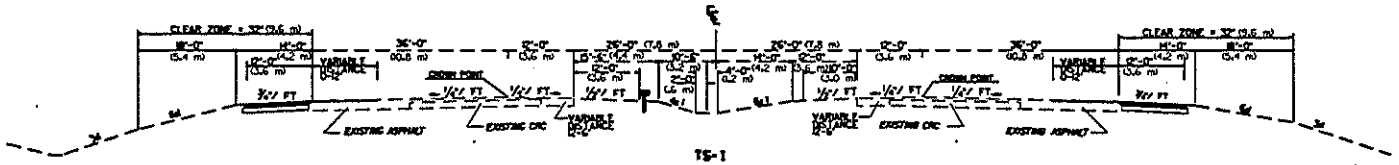
52' (15.6 m) MED SUPER ELEVATION SECTION



TS-2
SUPERELEVATION SECTION

APPLIES TO STA. 781+08.12 TO STA. 783+14.128

52' (15.6 m) MED TANGENT SECTION



TS-1
TANGENT SECTION

APPLIES TO STA. 778+82.57 TO STA. 781+08.12

TYPICAL SECTION
PHASE II
SCALE= 1":10'

D.O.T. 4

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

COPY

INTERDEPARTMENT CORRESPONDENCE

FILE I-95 Corridor
I-95 Widening and Reconstruction

OFFICE Atlanta, GA.

DATE July 6, 1993

FROM Roland W. Hinners, P.E., State Road & Airport Design Engineer JAK

TO SEE DISTRIBUTION BELOW

SUBJECT MINUTES OF I-95 CORRIDOR MEETING WITH FHWA AND GDOT MANAGEMENT

The I-95 corridor meeting was held June 9, 1993 at 9:30 a.m. in the Road Design Conference Room. Persons present were: Jim Condron, Frank Julian, Floyd Moore, Lee Reynolds, all from FHWA and Charles Lewis, Frank Danchetz, Paul Mullins, Tom Turner, John Lively, Bobby Mustin, Wouter Gulden, Paul Liles, Holmes Clements, Roland Hinners, Jim Kennerly, Milton White, Jim Graybeal, Wayne Mote, Mike Reynolds, Kevin Hosey, and Jim Fuerst all from GDOT.

The meeting was opened by Jim Kennerly who stated that there were four different mainline typical sections considered for the I-95 corridor as follows: 40′ median with Guardrail, Concrete Median Barrier, 52′ median with Guardrail and 52′ median without Guardrail. Jim Kennerly then turned the meeting over to Jim Condron for his comments on the different typical alternates.

Jim Condron stated that their two main concerns are safety and drainage. He said that he would not recommend narrow medians for rural Interstates in any cases and that I-95 is somewhat different from other projects with a 40′ median. He also stated that he is concerned with the drainage aspects of the 40′ median. He also said that they had problems with the Truman Parkway with drainage but it had a narrower median. He wanted to explore the possibility of widening all on the outside and retaining the 64′ median or widening with one lane in one direction in the median and the other lane on the outside in the other direction.

Frank Danchetz was concerned that Jim Condron was talking about the entire corridor but Mr. Lewis wanted to discuss those projects north of I-16 and the projects south of U.S. 17. Frank asked if authorization had been given for NH-IM-95-1(108). John Lively said that unit 108 had been approved by FHWA. Jim Condron said that he was not aware that unit 108 had been approved but John Lively assured him that we have a signed copy of the concept from FHWA.

The meeting was then turned back over to Jim Kennerly. Jim stated that the GDOT's biggest concerns were safety drainage and wetland impacts. Jim talked about the median barrier alternate and said the GDOT is reluctant to go with it because of the drainage problems that would be expected because of the extremely flat grades that are on I-95.

Milton White stated that in order to drain the concrete median barrier alternate the shoulder would have to be rolled in order to give it a slope. This would be very unsafe since the shoulder would be peaked every 130 feet giving you approximately 260 feet between low point drop inlets. This would also be unsightly and the driver expectancy would be enhanced to provide a shoulder with a constant slope. Milton also stated that cross drain pipes would need to be jacked and bored at every other drainage structure to be able to adequately handle the runoff. Roland Hinners stated that the median barrier would involve sweeping and that the drainage structures and pipes may need to be cleaned approximately four times a year. He thought that this could be as risky as mowing the 13.5′ strip of grass in the 40′ median. Milton White also stated that the median barrier alternate would not be able to drain totally to the outside because of the possibility of hydroplaning.

Jim then talked about the 40 ft. median with Guardrail. He stated that with the 40 ft. median alternate the roadway would basically stay on the existing footprint which would minimize some of the wetland impacts. Jim also stated that the drainage provided should function adequately because we could use the existing side drains by extending them and placing a drop inlet between every existing drop inlet in the median. This alternate would have a shallow ditch of 1.13′ in the median and it would carry the runoff. The question of maintaining a 13.5′ strip of grass was brought up previously by District 5. They questioned the safety of mowing such a narrow strip of grass in the median on I-95. Jim then stated that perhaps we should consider other alternates.

The 52′ median was subsequently considered. This median would almost double the median ditch depth to 2.2′ and would allow for more storage of runoff in the median. There would be adequate lateral clearance under the overhead bridges to handle the future (phase 2) four lane section. The downside of this typical section is that in the existing CRC sections, there would be a reflective crack between the existing CRC and the new asphalt pavement in the center of the inside lanes and the center of the outside under Phase 1.

Jim Condron asked what kind of slope would be appropriate and which way would it drain. Jim Kennerly responded that a ¼" would be used for the cross slope and that it would drain one lane and shoulder inside and ultimately three lanes and shoulder to the outside.

Jim Kennerly said that Office of Road Design's plans are now to submit NH-IM-95-1(124) with a 52' median with Guardrail based on the fact that motorists would feel more comfortable with a 52' median and that with the wider median, cross over median accidents would be less likely to occur as well as provide for more runoff storage due to the deeper ditch.

Frank Julian stated that the need for Guardrail with a 52' median depends on how high the traffic volume would be and that guardrail may not be necessary in lower traffic volume areas. Charles Lewis agreed with Frank Julian and added that he felt that both options were feasible but that he preferred to use the Guardrail with the 52' median. Frank Julian gave out a cost comparison chart of the four alternates based on installation cost and user cost and said that Alternate #3, 52' median without Guardrail, is exploring a new area and should be considered in segments of lower traffic.

Jim Condron asked what design storm frequency the drainage calculations were based on? Jim Kennerly and Milton White said it was based on a 50 year design storm.

Tom Turner stated that existing cross slopes were probably flatter than the ¼"/ft. shown on the old plat and that we should verify this slope. He said it would be difficult to construct the transition from roadway crown point to Bridge crown point but it could be accomplished.

Charles Lewis agreed that the bridges should drain to the outside if the crown point is on the inside lane edge of pavement but keep the crown in the center of the two lanes (existing) if bridges are crowned in the center (2 lane section). Paul Liles stated that we would not close in the bridges along I-95 with the 52' median. Mike Reynolds suggested that we might want to transition to a 40 foot median at the Savannah River Bridge in order to keep from having to drain 4 lanes to the outside across such a long bridge (2800 feet). Frank Danchetz suggested that we end the project at the

S.R. 21 Interchange. Mike Reynolds stated that capacity studies show that this interchange's northbound entrance ramp needs additional lanes northbound on I-95 to function properly in the design year. It was agreed to end the widening northbound midway between the last interchange and the Savannah River Bridge, and to begin the third lane southbound just south of the Savannah River. Charles Lewis and the FHWA agreed that we should not widen the Savannah River Bridge with NH-IM-95-1(124), but widen those bridges later when South Carolina brings their section of I-95 on line.

Jim Condron asked how is the 3½" overlay going to affect the CRC pavement? Wouter Gulden said there should be no unmanageable problems with reflective cracking and that we should overlay sections of CRC before it began to show more serious distress and we would replace any poor sections of CRC. Wouter also said that we should use a waterproof membrane over the joint between the asphalt and the CRC.

John Lively asked Jim Graybeal if we went with a 52' median would it delay his projects in Camden County. Jim Graybeal answered that he will have to redo the Concept Report for NH-IM-95-1(114), but he should be able to make the April 1994 letting as the project is scheduled now.

Jim Condron then recommended that we use the 52' median with or without Guardrail depending on the traffic volumes of the area. He also suggested that we keep the Corp of Engineers and Fish and Wildlife up to date on what we are planning to do on I-95. He indicated that early consideration of wetland impacts have played a part in our decision making and we should make these resource agencies aware of this. He also said that the concrete median barrier should no longer be considered as a corridor alternative.

The meeting was adjourned.

RWH:MGR:JAK:JAF:pef

xc: John Lively
Charles Lewis
Frank Danchetz
Paul Mullins
Tom Turner
FHWA, Attn: Floyd Moore
Bobby Mustin
Ronald Collins/Wouter Gulden
Paul Liles
Marion Waters
Craig Brack

Jim

GEORGIA DEPARTMENT OF TRANSPORTATION
WORK AUTHORIZATION

F: A. State Transportation Improvement Program P.I.# 511080
B. Federal Aid Item # 021028

SYMBOL NO	SEC	UNIT	COUNTY	CD	FY	PHASE
NH-95-1(116)			CAMDEN	1	1993	P/E

* CHARACTER OF PROPOSED WORK AND REMARKS/STIPULATIONS
*
* PRELIMINARY ENGINEERING AND ASSOCIATED INCIDENTALS FOR THE
* FUTURE WIDENING
*
*
* ROW APPRAISALS AND ASSOCIATED INCIDENTALS. FA PARTICIPATION
* WILL BE LIMITED TO THE AREAS INCORPORATED INTO THE FINAL ROW
* FOR PROJECT.
*

STATE ROUTE: SR 405 MILEAGE: 6.72
I-95 FM HARRIETT'S BLUFF RD TO SR 25 SPUR

REQUEST:	Federal	State	Other	Fund/Appn Code
$145,000	$116,000	$29,000	-0-	NH(315)

FHWA involvement: [X] Full [ ] Exempt [ ] CA

Authorization requested for amount of federal funds shown above.

Signed: Herman J. Russell Date: 1-8-93
State Transportation Programming Engineer

Authorization granted to proceed.

Signed: Charles M. McGehee Date: 2-4-93
For the Division Administrator, FHWA

Work is authorized and is to proceed as scheduled. The Director of Administration is requested to open the necessary accounts.

Signed: Wayne Shackelford Date: 2/4/93
Commissioner, Ga. DOT

* Items marked below with [XX] are applicable to this phase
* of work.
*
*
*
* [ ] Urban Transportation planning actions per 23 CFR 450.,
* Sub B, Annual Element/TIP Identifying #
* [X] Categorical Exclusion per 23 CFR 771.
*
* [ ] Work to be accomplished by: _____
*
* [X] ADJUSTMENT OF UTILITIES.
*
*
* [ ] FHWA participation limited to the areas incorporated into
* the final project R-O-W.
*
*
*
*
*
*
*
*
*

REVIEWED AND RECORDED
BY THE
OFFICE OF PROGRAMMING
DATE 1-8-93
BY [signature]

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED
SEP 21 1994
PRECONSTRUCTION

INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-95-1(116)&(126) Camden
P.I. Nos. 511080, 511082

OFFICE Atlanta

DATE Sept. 20, 1994

FROM James Kennerly, State Road & Airport Design Engineer

TO SEE DISTRIBUTION

SUBJECT Revised Minutes of Concept Meeting - FHAW & GaDOT on Widening I-95

A concept meeting on the above projects was held 9-6-94 at 9:00 a.m. in the Road Design Conference Room. Person's attending was: Floyd Moore/ FHWA, David Mulling, Jim Graybeal, Johnny Quarles, Greg Barfield, Wayne Mote, Michelle Cain, Sassan Malkami, Todd Ketner, and Benne Blun all from GDOT.

Wayne Mote gave an overview of the existing and proposed roadway. He said that these two projects would be simple and a major concept meeting would not be necessary. He also said that the project consisted of two phases: The first phase would provide for 3-lanes each direction and full depth shoulders. Phase II, full depth shoulder would then be opened as the fourth lane in each direction, thus giving an eight lane rural interstate. The 64 ft. median will become a 52 ft. median by adding 1/2 lane to the inside and 1-1/2 lane to the outside. The split median will have both lanes added to the inside. The floor was opened for questions.

Michelle Cain state that the Environmental Office knew wetlands exist on (126) and the archeologist would need to investigate the split median on(116).

Johnny Quarles felt that both projects were unnecessarily split into Phase I and Phase II. He said it would be cheaper to do all of the construction in one contract since the grading will already be in place during Phase I, and Phase II only consisted of an overlay to the fourth lane and adding a paved shoulder. David Mulling agreed with this argument.

It was discussed that some portions of the I-95 corridor were to be widened to 3-lanes initially and to open some portions of I-95 to 4-lanes would cause lane discontinuity interchange. Also, 3-lane will provide a level of service "B" until the year 2012 and 4-lanes

will provide a LOS B until the design year.

David Mulling presented the issue of matching the crown at the bridge ends of both projects. The Bridge Department said that there would possibly be a problem with adding an overlay on the existing bridge structures.

Floyd Moore expressed concern about the guardrail placement on the bridge sections during construction, and where the temporary concrete barriers would be placed.

Wayne Mote then talked about the NH-IM-95-1(126) project. Wayne gave an overview of the typical section of this project and pointed out the existing substandard sight distance and substandard super elevations. He also said that the DOT would like to separate the Satilla River Bridges and the White Oak Bridge so that they might be contracted to a consultant. It was said that an interchange at Horse Stamp Church Road had been requested by the locals in the past, the Planning Department had studied that request and at this time would not be justified.

The meeting was adjourned.

JK:JJG:bc

xc: Floyd Moore/FHWA
David Mullings
Johnny Quarles
Greg Barfield
Michelle Cain

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED
SEP 16 1994
PRECONSTRUCTION

INTERDEPARTMENT CORRESPONDENCE

FILE **NH-IM-95-1(116)&(126) Camden**
P.I. Nos. 511080, 511082

OFFICE Atlanta

DATE Sept. 16, 1994

FROM James Kennerly, State Road & Airport Design Engineer

TO SEE DISTRIBUTION

SUBJECT Minutes of Concept Meeting - FHWA & GaDOT on Widening I-95

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It was discussed that some portions of the I-95 corridor were to be widened to 3-lanes initially and to open some portions of I-95 to 4-lanes would cause lane discontinuity interchange. Also, 3-lane will provide a level of service "B" until the year 2012 and 4-lanes

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The meeting was adjourned.

JK:JJG:bc

xc: Floyd Moore/FHWA
David Mullings
Johnny Quarles Preconstruction
Greg Barfield
Michelle Cain

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

NH-IM-95-1(116)
NH-IM-95-1(131)
CAMDEN COUNTY

FEDERAL ROUTE NO: I-95
STATE ROUTE NO: 405
GADOT P.I. NO: 511080
511081

Date of Report: SEPT-10-1994

RECOMMENDATION FOR APPROVAL

9/9/94 DATE	James Kennedy — State Road & Airport Design Engineer
9/29/94 DATE	O.L.S. — State Environmental Engineer
DATE	State Traffic Operations Engineer
DATE	District Engineer
DATE	State Bridge Engineer

D.O.T.66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-95-1(116) & (131) Camden County
P.I. Nos. 511080 & 511081

OFFICE Traffic Operations
Atlanta, Georgia

DATE September 27, 1994

FROM MBR for Marion G. Waters, III, P.E., State Traffic Operations Engineer

TO Bob Mustin, P.E., Project Review Engineer

SUBJECT Project Concept Report Review

We have reviewed the concept report on the above projects for the widening and reconstruction of 7.0 miles (11.27 km) of I-95 from Harriett's Bluff Road to SR 25 Spur in Camden County. Construction is proposed to be in two phases as separate projects. Unit (116) is Phase I and will widen the roadway from two to three lanes in each direction. Unit (131) is Phase II and will widen the roadway from three to four lanes in each direction. Approximately 1.8 miles (2.9 km) of the project has an existing 64 foot (19.2 m) median with the remaining 5.2 miles (8.4 km) having a split median.

Phase I construction will add 24 feet (7.2 m) of full depth paving in each direction plus grading for the final Phase II section. In the 64 foot (19.2 m) median section the full depth paving will add 6 feet (1.8 m) to the inside and 18 feet (5.4 m) to the outside. In the split median section the 24 feet (7.2 m) will all be added to the inside. One of the Phase II travel lanes in each direction will be used as a 12 foot (3.6 m) paved shoulder in Phase I. Mainline bridges will be widened to four 12 foot (3.6 m) lanes in each direction with 14 foot (4.2 m) shoulders inside and outside.

Phase II will include 14 foot (4.2 m) outside shoulders (12 foot (3.6 m) paved) in both directions and 12 foot (3.6 m) inside shoulders (10 foot (3.0 m) paved) in both directions except in the existing 64 foot (19.2 m) median section one direction will have a 15.5 foot (4.4 m) inside shoulder (12 foot (3.6 m) paved) to accommodate double-face guardrail in the proposed 52 foot (15.6 m) median.

In Phase I, the report proposes to utilize the three inside lanes for traffic in the 52 foot (15.6 m) median section and the three outside lanes for traffic in the split median section. In one of the two transition areas this will require traffic in the inside lane to cross over the roadway crown which will be located between the inside lane and the second lane from the inside. The other transition area is located in a superelevated horizontal curve with a constant slope across all four lanes.

We recommend the concept for Phase I be revised to utilize the three outside lanes for traffic rather than the three inside lanes in the existing 64 foot (19.2 m) median section. This will provide a number of advantages without affecting the basic design since all grading for the Phase II section will be done on Phase I.

1) The "crown crossover" problem in transition areas to the split median section will be eliminated since the outside three lanes will be used throughout the corridor.
2) The overhead guide signs can be installed in Phase I at the correct locations for use on Phase II. If the inside lanes are used, the gore location of exit ramps will shift on Phase II requiring relocation of the exit direction signs. The advance guide sign structures would also have to be relocated, or sign bridges used, since the maximum length of cantilevered sign structures is presently 40 feet.
3) All Phase II work would be on the inside, rather than some inside and some outside, simplifying construction and causing less disruption to traffic.
4) The double-face guardrail could be eliminated from the median since the net effect of the Phase I project would be to widen the median to 76 feet (22.8 m). This would not only be a cost savings in the construction, but would eliminate the maintenance costs of the guardrail until Phase II is implemented and the "hazard" to motorists of the guardrail located 12 feet (3.6 m) from the travel lane.

We believe this concept will improve safety and operational capacity on this section of roadway. Subject to the above recommendations, we therefore find this report satisfactory for approval.

MGW:TOC:dc

Attachment (signature page)

cc: David Studstill
James Kennerly (Attn: Jim Graybeal)
Wayne Hutto, w/attachment
General Files

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

NH-IM-95-1(116)
NH-IM-95-1(131)
CAMDEN COUNTY

FEDERAL ROUTE NO: I-95
STATE ROUTE NO: 405
GADOT P.I. NO: 511080
511081

Date of Report: SEPT-10-1994

RECOMMENDATION FOR APPROVAL

DATE 9/9/94	James Kennedy State Road & Airport Design Engineer
DATE	State Environmental Engineer
DATE 9/23/94	M. G. Waters, Jr. State Traffic Operations Engineer
DATE	District Engineer
DATE	State Bridge Engineer